From: d'Almeida, Carolyn K. [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP
(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=9EC4401AFA1846DD93D52A0DDA973581-CDALMEID]
Sent: 3/16/2016 9:27:04 PM
To: Davis, Eva [Davis.Eva@epa.gov]; Dan Pope [DPope@css-dynamac.com]
Subject: FW: 2016-3-16 - wafb - ST012 - FYI - SEE termination - Mar BCT - BStewart praxis

fyi

From: Wayne Miller [mailto:Miller.Wayne@azdeq.gov]
Sent: Wednesday, March 16, 2016 2:25 PM
To: d'Almeida, Carolyn K. <dAlmeida.Carolyn@epa.gov>
Subject: 2016-3-16 - wafb - ST012 - FYI - SEE termination - Mar BCT - BStewart praxis

FYI – Some quickie thoughts from Bo Stewart, Praxis Environmental on SEE status

From: Steve Willis [mailto:steve@uxopro.com]
Sent: Wednesday, March 16, 2016 1:43 PM
To: Wayne Miller <Miller.Wayne@azdeq.gov>
Subject: 2016-3-16 - wafb - ST012 - SEE termination - Mar BCT -BStewart praxis

Some thoughts from Bo

> *Steven A. Willis, R.G.*
> *UXO Pro, Inc.*
> *Arizona Registered Geologist #30448*
> *(480) 316-3373*
> *steve@uxopro.com*

----- Original Message -----
From: Bo Stewart <Bo@praxis-enviro.com>
To: Steve Willis <steve@uxopro.com>
Sent: Wednesday, March 16, 2016 12:45:05 PM
Subject: Re: ST012 EBR

At this point, I don't think the steam is doing much except diluting the extract. Whatever steam was going to do, it has done. You can see ii un an increase in the vapor mass extraction rate with the steam turned off (no dilution). This dilution is also evident in the wellhead water concentrations, lower numbers in Feb (steam on) than in March (steam off), even on the interior wells. Only one or two exceptions in each zone.

I believe they will find plenty of residual NAPL in the TTZ that was bypassed by the steam zones. Soils being heated doesn't mean any flow occurred and therefore any residual NAPL in those zones may look much as did it before heating. All of the UWBZ has such zones and at the top of the LSZ, just below the LPZ, I expect to find plenty of residual NAPL as it was likely bypassed by flow through more permeable deeper intervals.

Long story short, mass extraction rates will continue to be high for a while, especially from the UWBZ. We may see them go higher in the vapor phase than we've seen in months. Look at Figure 4 in the last weekly report, it went over 3,000 lbs/day and dissolved in groundwater maxes out at ~250 lbs/day.

I will get on the EBR Work Plan shortly.

Thanks

On 3/16/2016 11:41 AM, Steve Willis wrote:

> Hi Bo,
>
> What are your thoughts on yesterday's meeting? I don't anticipate they're going to turn the steam back on, so I'm thinking our next battle is going to be getting them to extract for a sufficient time period.
>
> I uploaded the Draft Final EBR work plan to the FTP site; we should probably get to this as soon as we can. You should focus your review on their responses to our comments, particularly the comments you submitted, but if you see something in the responses to EPA that you want to comment on, go ahead. I'll have Eleanor reviewing it also, and I'll go through it in detail to ensure they incorporated any required changes.
>
> There's a new password for the FTP: UXOPro(123$).   The work plan is in the following folder:
>
> UXOPro Transfer Files/Arizona DEQ/Williams AFB/ST012/EBR/Draft_Final_......
>
> Thanks,
>
> *Steven A. Willis, R.G.*
> *UXO Pro, Inc.*
> *Arizona Registered Geologist #30448*
> *(480) 316-3373*
> *steve@uxopro.com*

--
Lloyd "Bo" Stewart, PhD, PE
Praxis Environmental Tech., Inc.